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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/995,052	11/27/2001	Roger Cook	065424/9015	9713

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EXAMINER

PHAM, LEDA T

ART UNIT	PAPER NUMBER
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2834

DATE MAILED: 06/04/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/995,052

**Applicant(s)**

COOK, ROGER

**Examiner**

Leda T. Pham

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 2 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. In the claim, "without a bearing acting to support the rotor at a distance from the main body of the compressor," how does the rotation happen to the rotor? It is understood there is no bearing support the rotatable shaft.

***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 4 –6, and 9 are rejected under 35 U.S.C. 102(b) as being anticipated by Unnewehr et al. (U.S. Patent No. 5,222,874).

Referring to claim 1, Unnewehr teaches a compressor and driving motor assembly (figure 2) in which the motor comprises a rotor and a stator assembly (54, 56), and the compressor (14)

comprises a main body which supports a drive shaft (50), the rotor being mounted directly on the drive shaft, in which the drive shaft acts as a cantilever supporting the rotor.

Referring to claim 4, Unnewehr teaches the assembly in which the rotor is shaped so as to have a central longitudinal aperture adapted to fit to a corresponding tapered portion of the drive shaft (figure 2).

Referring to claim 5, Unnewehr teaches the assembly in which the compressor has a housing, and the stator assembly is connected to the housing of the compressor (figure 2).

Referring to claim 6, Unnewehr teaches the assembly in which the stator assembly is directly connected to the housing (figure 2).

4. Claims 1, 3, 10 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Atkinson et al. (U.S. Patent No. 5,912,516).

Referring to claim 1, Atkinson teaches a compressor and driving motor assembly (figure 4) in which the motor comprises a rotor and a stator assembly, and the compressor comprises a main body which supports a drive shaft, the rotor being mounted directly on the drive shaft, in which the drive shaft acts as a cantilever supporting the rotor.

Referring to claim 3, Atkinson teaches the assembly according to claim 1, in which the motor is a hybrid permanent magnet motor.

Referring to claim 10, Atkinson teaches the driving motor being a hybrid permanent magnet motor.

Referring to claim 17, Atkinson teaches the assembly in which the motor comprises a rotor which is mounted directly on to a drive shaft of the compressor (figure 4).

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5. Claims 1, 5 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Holmes et al. (U.S. Patent No. 5,685,699).

Referring to claim 1, Holmes teaches a compressor and driving motor assembly (figure 1) in which the motor comprises a rotor and a stator assembly (12), and the compressor (13) comprises a main body which supports a drive shaft, the rotor being mounted directly on the drive shaft, in which the drive shaft acts as a cantilever supporting the rotor.

Referring to claim 5, Holmes teaches the assembly in which the compressor has a housing (23) and the stator assembly (16) is connected to the housing of the compressor (figure 1).

Referring to claim 7, Holmes teaches the assembly in which the stator assembly (16) is connected to the housing by way of an adapter flange (22).

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

7. Claims 1 and 8 are rejected under 35 U.S.C. 102(e) as being anticipated by Varney et al. (U.S. Patent No. 6,447,367 B1).

Referring to claim 1, Varney teaches a compressor and driving motor assembly (figure 2) in which the motor comprises a rotor and a stator assembly (10), and the compressor (10) comprises a main body which supports a drive shaft, the rotor being mounted directly on the drive shaft, in which the drive shaft acts as a cantilever supporting the rotor.

Referring to claim 8, Varney teaches the assembly in which the compressor is an air compressor.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Unnewehr in view of Meeks (U.S. Patent No. 5,216,308).

Referring to claim 2, Unnewehr teaches the claim invention, except for the added limitation of the assembly without a bearing acting to support the rotor.

Meeks teaches an assembly having no bearing acting to support the rotor (lines 11 –15, column 3) to produce lightweight system and having a high degree of power efficiency.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the compressor and driving motor assembly without bearing

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acting support the rotor as taught by Meeks. Doing so would produce lightweight system and having a high degree of power efficiency.

10. Claims 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson in view of Varney.

Referring to claim 11, Atkinson teaches the claim invention, except for the added limitation of the compressor is an air compressor.

Varney teaches the system in which the compressor is an air compressor to supply compressed air to the operating and control equipment (line 25 – 29, column1).

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to using the air compressor in the assembly as taught by Varney. Doing so would supply compressed air to the operating and control equipment.

11. Claims 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson in view of Unnewehr.

Referring to claim 12, Atkinson teaches the claim invention, except for the added limitation of the compressor is a rotary screw compressor.

Unnewehr teaches the system in which the compressor is a rotary screw compressor to direct a flow of liquid for cooling a system.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to using the rotary screw compressor in the assembly as taught by Unnewehr. Doing so would direct a flow of liquid for cooling a system.

12. Claims 13 - 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson in view of Zinsmeyer (U.S. Patent No. 4,514,991).

Referring to claim 13, Atkinson teaches the claim invention, except for the added limitation of the motor is a fixed speed motor.

Zinsmeyer teaches the system in which the motor is a fixed speed motor to drive a rotary machine or a compressor.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to using the fixed speed motor as taught by Zinsmeyer. Doing so would drive a rotary machine or a compressor.

Referring to claim 14, Zinsmeyer teaches the assembly in which the motor is a variable speed motor.

13. Claims 15 - 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson in view of Porri (U.S. Patent No. 5,302,300).

Referring to claim 15, Atkinson teaches the claim invention, except for the added limitation of the compressor is of flooded type.

Porri teaches the system in which the compressor is of flooded type for separating water condensate from a water/oil condensate mixture collected during operation of compressed air system.

Thus, it would have been obvious to one having ordinary skill in the art at the time the invention was made to using the flooded type compressor as taught by Porri. Doing so would separate water condensate from a water/oil condensate mixture collected during operation of compressed air system.

Referring to claim 16, Porri teaches the assembly in which the compressor is of oil-free type (lines 28 – 30, column 2).



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*Conclusion*

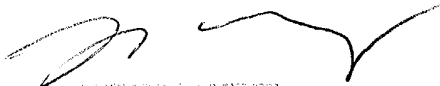
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Leda T. Pham whose telephone number is (703) 305-4864. The examiner can normally be reached on M-F (7:30-5:00) first Friday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308-1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-9176 for regular communications and (703) 305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3431.

Leda T. Pham  
Examiner  
Art Unit 2834

LTP  
June 2, 2003

  
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